

### **REMARKS**

Claims 14, 15, 17, 20-22, 39, 40, 42, 45-47 and 58 are pending and under consideration.

#### **I. CLAIM REJECTION UNDER 35 U.S.C. § 112, FIRST PARAGRAPH, FOR LACK OF WRITTEN DESCRIPTION**

Claims 14, 15, 17, 20-22, 39, 40, 42, 45-47 and 58 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Patent Office alleges that the amendment to claims 14, 17, 20, 22 39, 42, 45-47 and 58 reciting in relevant part “identifying one or more genotypic data structures . . . that have correlation values that are higher than the correlation values for all other genotypic data structures” presents new matter. Applicants respectfully traverse the rejection.

“The specification as originally filed must convey clearly to those skilled in the art the information that the applicant has invented the specific subject matter later claimed. . . . When the original specification accomplishes that, regardless of *how* it accomplishes it, the essential goal of the description requirement is realized.” *In re Wright*, 9 U.S.P.Q.2d 1649, 1651 (Fed. Cir. 1989) (citing *In re Smith*, 178 U.S.P.Q. 620,624 (CCPA 1973))(citations omitted).

Applicants respectfully submit that the specification as originally filed clearly conveys to those skilled the element of “identifying one or more genotypic data structures . . . that have correlation values that are higher than the correlation values for all other genotypic data structures.” For instance, the specification states

The phenotypic and genotypic data structures are then compared to form a correlation value. The process continues with the establishment of another genotypic data structure that corresponds to a different loci and the concomitant comparison of this genotypic data structure to the phenotypic structure until several of the loci in the genome of the organism have been tested in this manner. In this way, one or more genotypic data structures are *identified that form a high correlation value relative to all other genotypic data structures* that have been compared to the phenotypic data structure.

Specification, page 5, lines 1-8 (emphasis added). In addition, claim 1 as originally filed in the instant application recites “identifying one or more genotypic data structures that form a high correlation value relative to all other genotypic data structures.” The claimed subject matter need not have the exact wording in the specification in order for the specification to satisfy the description requirement. *See In re Wright*, 9 U.S.P.Q.2d 1649, 1651 (Fed. Cir.

1989) (stating that “[t]he fact, therefore, that the exact words here in question, ‘not permanently fixed’, are not in the specification is not important.”).

The Patent Office acknowledges that the specification supports identifying highly correlated genotypic data structures by computation of a mean correlation value and selecting genotypic data structures that are several standard deviations above a calculated mean correlation value. *See* Office Action, pages 3 and 4. The Patent Office acknowledges that the specification supports using specific correlation threshold values to identify those genotypic data structures that are considered the highest correlation values. *See* Office Action, pages 3 and 4. Indeed, the specification provides that in some embodiments “statistical methods are used to identify which of the genotypic data structures that have been compared to phenotypic data structure are highly correlated.” Specification, page 6, lines 15-17. Taken as a whole, the specification as originally filed conveys clearly to those skilled in the art that the applicant has invented the specific subject matter at issue in the instant claims. Hence, Applicants respectfully submit that specification meets the description requirement for the subject matter recited in the instant claims.

For the foregoing reasons Applicants respectfully request that the rejection of claims 14, 15, 17, 20-22, 39, 40, 42, 45-47 and 58 under 35 U.S.C. § 112, first paragraph, be withdrawn.

## **II. CLAIM REJECTION UNDER 35 U.S.C. § 101**

Claims 14, 15, 17, 20-22, 39, 40, 42, 45-47 and 58 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter. The Patent Office alleges that the claims “are not limited to producing only a concrete and tangible result.” Office Action, page 6. Applicants respectfully disagree.

The pending claims recite concrete, tangible and useful final results. The methods of claims 14, 15, 17 and 20-22, for example, identify genotypic data structures, which correspond to loci in chromosomal regions that are associated with a phenotype in a strain. As discussed in the specification, techniques for associating phenotypes with chromosomal regions have important scientific and technological applications and are thus highly desirable. *See, e.g.*, specification, page 3, lines 10-31. Thus, the results of the recited methods are information regarding the chromosomal regions associated with a phenotype—a tangible, concrete and useful result. Claims 39, 40, 42, 45-47 and 58 are directed to computer program products or computer systems that identify chromosomal regions associated with a phenotype in a strain and thus produce concrete, tangible and useful results.

Given the above, Applicants contend that the rejected claims produce concrete, tangible and useful results. Applicants understand that the recited step of “communicating said one or more genotypic data structures” to “a readily accessible computer memory or other computer on a network” in rejected claims 14 20, 39, 42, 45, 46, 47, and 58 *may* generate a transitory signal. However, Applicants respectfully point out that the mere *generation* of a transitory signal will not satisfy the recited step in the rejected claims because the step requires that the one or more genotypic data structures be *received* by a readily accessible computer memory or other computer on a network. In other words, there can be no communicating with a readily accessible computer memory or other computer on a network, as required by Applicants’ claims, unless the readily accessible computer memory or other computer on a network has *received* the one or more genotypic data structures. Any definition of “communicating” in the context of the recited communication step requires data to pass from one entity to another entity (*i.e.*, for the data to be *received*). See, for example, the definition for the word “communicate” on page 266 of *Webster’s Ninth New Collegiate Dictionary*, 1991, Merriam-Webster, Inc., Springfield, Massachusetts: “to cause to pass from one to another.” A copy of this definition is enclosed as Appendix A. Furthermore, by the very nature of how a readily accessible computer memory or other computer on a network is built and functions, such devices cannot receive the one or more genotypic data structures unless they electronically store the one or more genotypic data structures in memory. And such storage necessarily causes the generation of a concrete and tangible result (storage of the one or more data structures in the readily accessible computer memory or other computer on a network), in direct contrast to the transitory signal that may have carried the one or more genotypic data structures to the readily accessible computer memory or other computer on a network.

In *Arrhythmia Research Technology Inc. v. Corazonix Corp.*, the court considered whether a claim directed to a method that analyzes electrocardiograph signals to determine a numerical value representing the presence or absence of a predetermined level of high-frequency energy in the late QRS signal, and uses the numerical value to indicate whether the patient is at high risk for ventricular tachycardia is statutory. The court held that such a claim is statutory because “[t]he resultant output is not an abstract number, but is a signal related to the patient’s heart activity.” *Arrhythmia Research Technology Inc. v. Corazonix Corp.*, 22 U.S.P.Q.2d 1033, 1037-38 (Fed. Cir. 1992). In *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, the court considered whether a computer system that transforms data representing discrete dollar amounts through a series of mathematical calculations into a final

share price constitutes a practical application of a mathematical algorithm, formula, or calculation. The court held that:

... the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, *because it produces "a useful, concrete and tangible result"-- a final share price* momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.

*State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 U.S.P.Q.2d 1596, 1601 (Fed. Cir. 1998) (emphasis added). The claims held to satisfy 35 U.S.C. § 101 in *Arrhythmia* and *State Street* did not have an outputting step. Thus, if a numerical value indicating whether a patient is at high risk for ventricular tachycardia and a final share price are useful, concrete and tangible results, an indication of the chromosomal regions in a genome associated with a phenotype cannot be otherwise.

The Patent Office alleges:

... the recent decision issued by the Federal Circuit Court of Appeals in *In re Nuijten* . . . set forth that signals, encompassing the transmission of information, are transitory in nature and do not encompass statutory subject matter. In the instant case, the recited step of "communicating" a result to "a readily accessible computer memory or other computer on a network" does not produce a concrete and tangible result as said embodiments read on the generation of a transitory signal and thus are not concrete and tangible.

Office Action, page 6. In fact, the court in *In re Nuijten* notes that Nuijten was allowed claims to a process, *e.g.*, a method of embedding supplemental data in a signal, a device that performs that process, and a storage medium holding the signals. *See In re Nuijten*, 84 U.S.P.Q.2d 1495, 1498 (Fed. Cir. 2007). The question in *In re Nuijten* was not whether processes, devices or storage medium relating to a signal were patentable, but rather if a claim directed to the signal *per se* was statutory subject matter. *See In re Nuijten*, 84 U.S.P.Q.2d 1495, 1500 (Fed. Cir. 2007). The instant claims are directed to processes, *i.e.*, methods, computer program products or computer systems that are well within requirements for statutory subject matter.

The Examiner also contends in error that the claims encompass "non-tangible" results because "output of a result to a readily accessible computer memory or other computer on a network would be considered as encompassing non-statutory embodiments." Office Action,

page 7. Applicants submit that such a standard is improper and inconsistent with court precedent. Applicants are aware of no case that support the proposition that communicating a concrete, useful and tangible result to a readily accessible computer memory or other computer on a network transforms the result into a non-tangible one. The Court of Appeals for the Federal Circuit found a numerical value indicating whether a patient is at high risk for ventricular tachycardia (*Arrhythmia*) and a final share price (*State Street*) to be useful, concrete and tangible results, even without a communicating or outputting step. Accordingly, Applicants respectfully submit that the claims are directed to concrete, useful and tangible results.

With regard to claims 39, 40, 42 and 45-47, each drawn to a computer program product, the Patent Office alleges that the “specification does not provide a limitation definition for the recited ‘computer readable storage medium’ as encompassing only physical computer readable media. Office Action, page 7. However, Applicants respectfully submit that a computer readable storage medium necessarily requires a physical object. For instance, the Patent Office acknowledges that signals *per se* are transitory in nature (*see, e.g.*, Office Action, page 7). Transitory signals taken alone are not compatible with a common understanding of a “storage medium.” For the foregoing reasons, Applicants respectfully submit that the instant claims are directed to statutory subject matter.

Applicants respectfully request that the rejection of claims 14, 15, 17, 20-22, 39, 40, 42, 45-47 and 58 under 35 U.S.C. § 101 be withdrawn.

### **III. CLAIM REJECTION UNDER 35 U.S.C. § 103(a)**

Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Satagopan *et al.*, *Genetics*, volume 144, pages 805-816, 1996. Applicants respectfully traverse. For example, the Patent Office alleges that, at page 809, column 2, lines 29-47, of Satagopan *et al.*, “models are being compared to a correlation value wherein the ratio of marginal probabilities of the two compared models is the Bayes factor” which is equivalent to determining a correlation value as recited in claim 46. Office Action, page 9. However, contrary to the Patent Office’s allegation, Satagopan *et al.* do not teach or suggest determining a correlation value for a genotypic data structure by a comparison of a phenotype data structure with a genotypic data structure nor for determining correlation values for a plurality of genotypic data structures as recited in Applicants’ claim 46. Rather, what is being computed by Satagopan *et al.* in the cited passage is a Bayes factor. A Bayes factor is not a correlation value; it is instead a ratio whose value is indicative of whether a given

model is more strongly supported by available data than another model. In Satagopan *et al.* these models assume, for instance, a single quantitative trait loci (QTL), two QTL and so forth. See Satagopan *et al.* page 806, second col., lines 2-3 (“Bayes factor is used to estimate the number of QTL”).

Even assuming that the approach to detect quantitative trait loci (QTL) described in Satagopan *et al.* associates phenotypes with marker loci, the computational methodology described in Satagopan *et al.* in no way teaches or suggests that recited in instant claim 46. For instance, the approach in Satagopan *et al.* requires data from progeny of two parents (see, e.g., Satagopan *et al.*, page 810, last paragraph, through page 811, first full paragraph) which is not a requirement in claim 46. Moreover, Satagopan *et al.*, do not teach or suggest determining a correlation value by a comparison of a phenotypic data structure with a genotypic data structure as such structures are recited in claim 46. Specifically, claim 46 recites a “phenotypic data structure comprising a *difference in a phenotype* between different strains of said species,” and a “genotypic data structure comprising a variation of at least one component of said locus between different strains of said species.” Satagopan *et al.* do not teach or suggest a phenotypic data structure that comprises a difference in phenotype between different strains of a species.

For the foregoing reasons, Satagopan *et al.* do not recite each and every limitation of claim 46. Accordingly, Applicants respectfully request that the rejection of claim 46 under 35 U.S.C. § 103(a) be withdrawn.

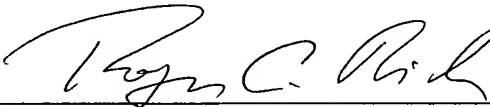
### **CONCLUSION**

Applicants respectfully request that the present remarks be made of record in the instant application. In view of the above remarks, Applicants respectfully submit that the subject application is in good and proper order for allowance. Withdrawal of the Examiner’s rejections and objections and early notification to this effect are earnestly solicited.

No fees are believed to be due. However, if any fees are due in connection with this submission, please charge the required fees to Jones Day Deposit Account No. 50-3013 (order no. 800935-999015).

Respectfully submitted,

Date: April 7, 2008



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Library of Congress Cataloging in Publication Data  
Main entry under title:

Webster's ninth new collegiate dictionary.

p. cm.

ISBN 0-87779-508-8. — ISBN 0-87779-509-6 (indexed). — ISBN  
0-87779-510-X (deluxe)

1. English language—Dictionaries. I. Merriam-Webster, Inc.

PE1628.W5638 1991

423—dc20

90-47350

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gest inferiority or coarseness (O hard is the bed . . . and common the blanket and cheap —A. E. Housman) ORDINARY stresses conformance in quality or kind with the regular order of things (an ordinary pleasant summer day) (a very ordinary sort of man) PLAIN is likely to suggest homely simplicity (the plain people everywhere . . . wish to live in peace — F. D. Roosevelt) FAMILIAR stresses the fact of being generally known and easily recognized (a familiar melody) POPULAR applies to what is accepted by or prevalent among people in general sometimes in contrast to upper classes or special groups (a popular tune) VULGAR, otherwise similar to POPULAR, is likely to carry derogatory connotations (as of inferiority or coarseness) (goods designed to appeal to the vulgar taste)

**common** *n* (14c) 1 *pl*: the common people 2 *pl but sing in constr*: a dining hall 3 *pl but sing or pl in constr, often cap*: a: the political group or estate comprising the commoners b: the parliamentary representatives of the commoners c: HOUSE OF COMMONS 4: the legal right of taking a profit in another's land in common with the owner 5: a piece of land subject to common use: as a: undivided land used esp. for pasture b: a public open area in a municipality 6 a: a religious service suitable for any of various festivals b: the ordinary of the Mass 7: COMMON STOCK — in common: shared together **common-age** *\kām-ə-nij\ n* (1649) 1: community land 2: COMMON-ALTY 1a(2)

**common-al-ty** *\kām-ə-nal-ə-tē\ n, pl -ties* [ME *communalitie*, alter. of *communalis*] (14c) 1: the common people 2 a: possession of common features or attributes: COMMONNESS b: a common feature or attribute

**common-al-ty** *\kām-ən-1-tē\ n, pl -ties* [ME *communalis*, fr. MF *communalis*, fr. *comunal* communal] (14c) 1 a (1): the common people (2): the political estate formed by the common people b: a usage or practice common to members of a group 2: a general group or body **common carrier** *n* (15c): an individual or corporation undertaking to transport for compensation persons, goods, or messages

**common cattle grub** *n* (1942): a cattle grub (*Hypoderma lineatum*) which is found throughout the U.S. and whose larva is particularly destructive to cattle

**common chord** *n* (1864): TRIAD 2

**common cold** *n* (1786): an acute virus disease of the upper respiratory tract marked by inflammation of mucous membranes

**common denominator** *n* (1594) 1: a common multiple of the denominators of a number of fractions 2: a common trait or theme

**common difference** *n* (ca. 1891): the difference between two consecutive terms of an arithmetic progression

**common divisor** *n* (ca. 1847): a number or expression that divides two or more numbers or expressions without remainder — called also **common factor**

**common-er** *\kām-ə-nər\ n* (14c) 1 a: one of the common people b: one who is not of noble rank 2: a student (as at Oxford) who pays for his own board

**common fraction** *n* (ca. 1891): a fraction in which the numerator and denominator are both integers and are separated by a horizontal or slanted line — compare DECIMAL FRACTION

**common ground** *n* (1926): a basis of mutual interest or understanding

**common-law** *adj* (1848) 1: of, relating to, or based on the common law 2: relating to or based on a common-law marriage

**common law** *n* (14c): the body of law developed in England primarily from judicial decisions based on custom and precedent, unwritten in statute or code, and constituting the basis of the English legal system and of the system in all of the U.S. except Louisiana

**common-law marriage** *n* (1900) 1: a marriage recognized in some jurisdictions and based on the parties' agreement to consider themselves married and sometimes also on their cohabitation 2: the cohabitation of a couple even when it does not constitute a legal marriage

**common logarithm** *n* (ca. 1891): a logarithm whose base is 10

**common market** *n* (1952): an economic unit formed to remove trade barriers among its members

**common measure** *n* (1718): a meter consisting chiefly of iambic lines of 7 accents each arranged in rhymed pairs usu. printed in 4-line stanzas — called also **common meter**

**common multiple** *n* (ca. 1890): a multiple of each of two or more numbers or expressions

**common noun** *n* (ca. 1864): a noun that may occur with limiting modifiers (as *a* or *an*, *some*, *every*, and *my*) and that designates any one of a class of beings or things

**common-place** *\kām-ən-plās\ n* [trans. of L *locus communis* widely applicable argument, trans. of GK *koinos topos*] (1561) 1 *archaic*: a striking passage entered in a commonplace book 2 a: an obvious or trite observation b: something commonly found

**commonplace** *adj* (1609): commonly found: ORDINARY, UNREMARKABLE — **common-place-ness** *n*

**commonplace book** *n* (1578): a book of memorabilia

**common pleas** *n pl* (15c) 1 a: actions over which the English crown did not claim exclusive jurisdiction b: civil actions between English subjects 2 *sing in constr*: COURT OF COMMON PLEAS

**common ratio** *n* (1875): the ratio of each term of a geometric progression to the term preceding it

**common room** *n* (1683) 1: a lounge available to all members of a residential community 2: a room in a college for the use of the faculty

**common salt** *n* (1676): SALT 1a

**common school** *n* (1566): a free public school

**common sense** *n* (1535) 1: the unreflective opinions of ordinary men 2: sound and prudent but often unsophisticated judgment *syn* see SENSE — **common-sense** *\kām-ən-sen(t)s\ adj* — **common-sen-sible** *\-sen(t)-sə-bəl\ adj* — **common-sen-sibly** *\-bly\ adv* — **common-sen-sical** *\-sen(t)-si-kəl\ adj*

**common situs picketing** *n* (1965): the picketing of an entire construction site by a trade union having a grievance with only a single subcontractor working there

**common stock** *n* (1888): capital stock other than preferred stock

**common time** *n* (1674): a musical tempo marked by four beats per measure with the quarter note receiving a single beat

**common touch** *n* (1944): the gift of appealing to or arousing the sympathetic interest of the common people

**com-mon-weal** *\kām-ən-wēl\ n* (14c) 1 *archaic*: COMMONWEALTH: the general welfare

**com-mon-wealth** *\kām-wēlth\ n* (15c) 1 *archaic*: COMMONWEALTH 2: a nation, state, or other political unit: as a: one founded on law and united by compact or tacit agreement of the people for the common good b: one in which supreme authority is vested in the people c: REPUBLIC 3 *cap*: the English state from the death of Charles I in 1649 to the Restoration in 1660 b: PROTECTORATE 1b 4: a state of the U.S. — used officially of Kentucky, Massachusetts, Pennsylvania, and Virginia 5 *cap*: a federal union of constituent states — used officially of Australia 6 *often cap*: an association of self-governing autonomous states more or less loosely associated in a common allegiance (as to the British crown) 7 *often cap*: a political unit having local autonomy but voluntarily united with the U.S. — used officially of Puerto Rico and of the Northern Mariana Islands

**Commonwealth Day** *n* (1958): May 24 observed in parts of the British Commonwealth as the anniversary of Queen Victoria's birthday

**common year** *n* (ca. 1909): a calendar year containing no intercalary period

**com-mo-tion** *\kə-mō-shən\ n* [ME, fr. MF, fr. L *commotio*, *commotus*, pp. of *commovere*] (15c) 1: a condition of civil unrest: or insurrection 2: steady or recurrent motion 3: mental excitement or confusion 4 a: an agitated disturbance: TO-DO b: noisy confusion: AGITATION

**com-mo-tion** *\kə-mōv, kām-ə-mōv\ n* [ME *commotio*, fr. MF *commuer*, pres. stem of *commouvoir*, fr. L *commovere*, to move] (14c) 1: to move violently: AGITATE 2: to rouse intense feeling in: excite to passion

**com-mu-nal** *\kə-myūn-1, kām-yūn-1\ adj* [F, fr. LL *communalis*, fr. L *communis*] (1811) 1: of or relating to one or more communes 2: of or relating to a community 3 a: characterized by collective ownership and use of property b: participated in, shared, or used in common by members of a group or community 4: of, relating to, or based on racial or cultural groups — **com-mu-nal-ly** *\-lē\ adv*

**com-mu-nal-ism** *\-1-z-əm\ n* (1871) 1: social organization on a communal basis 2: loyalty to a sociopolitical grouping based on religious or ethnic affiliation — **com-mu-nal-ist** *\-1-z-ist\ n or adj*

**com-mu-nal-ity** *\kām-yū-nal-ə-tē\ n, pl -ties* (1901) 1: communal state or character 2: a feeling of group solidarity

**com-mu-nal-ize** *\kə-myūn-1-z, kām-yūn-1-z\ v* -ized; -izing (1881): to make communal

**com-mu-nard** *\kām-yū-när(d)\ n* [F] (1874) 1 *cap*: one who supported or participated in the Commune of Paris in 1871 2: a person who lives in a commune

**com-mune** *\kə-myūn, v\ com-muned; com-mun-ing* [ME *commun* to converse, administer Communion, fr. MF *communier* to converse, administer or receive Communion, fr. LL *communicare*, fr. L *vi. obs*] (15c) 1: to talk over: DISCUSS (have more to — Shak.) ~ *vi* 1: to receive Communion 2: to communicate intimately (~ with nature)

**com-mune** *\kām-yūn, kām-yūn, kām-yūn\ n* [F, alter. of MF *commune*, fr. ML *communia*, fr. L neut. pl. of *communis*] (1673) 1: the smallest administrative district of many countries esp. in Europe 2: COMMON-ALTY 1a 3: COMMUNITY: as a: a medieval usu. municipal corporation b (1): MIR (2): an often rural community organized on a communal basis

**com-mu-ni-ca-ble** *\kə-myū-ni-kə-bəl\ adj* (14c) 1: capable of being communicated: TRANSMITTABLE (~ disease) 2: COMMUNICATIVE

**com-mu-ni-ca-bil-ity** *\-yū-ni-kə-bil-ə-tē\ n* — **com-mu-ni-ca-ble-ness** *\-yū-ni-kə-bəl-nəs\ n* — **com-mu-ni-ca-bly** *\-bly\ adv*

**com-mu-ni-cant** *\-yū-ni-kant\ n* (1552) 1: a church member entitled to receive Communion: broadly, a member of a fellowship 2: one that communicates: *specif*: INFORMANT — **com-mu-ni-cate** *\-yū-ni-kāt\ v* -cated; -cat-ing [L *communicatus*, pp. of *communicare* to impart, participate, fr. *communis* common — more at MEAN] *vi* (1526) 1 *archaic*: SHARE 2 a: to convey knowledge of or information about: make known (~ a story) b: to reveal by clear signs (his fear communicated itself to his friends) 3: to cause to pass from one to another (some diseases are easily communicated) ~ *vi* 1: to receive Communion 2: to transmit information, thought, or feeling so that it is satisfactorily received or understood 3: to open into each other: CONNECT (the rooms ~) — **com-mu-ni-tee** *\-yū-ni-kə-tē\ n* — **communicator** *\-yū-ni-kāt-ər\ n*

**com-mu-ni-ca-tion** *\kə-myū-nə-kā-shən\ n* (14c) 1: an act or instance of transmitting 2 a: information communicated b: a verbal or written message 3 a: a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior (the function of pheromones in insect ~); also: exchange of information b: personal rapport (a lack of ~ between old and young persons) 4 *pl*: a system (as of telephones) for communicating b: a system of routes for moving troops, supplies, and vehicles c: personnel engaged in communicating 5 *pl but sing or pl in constr*: a technique for expressing ideas effectively (as in speech) b: the technology of the transmission of information (as by the printed word or telecommunication) — **com-mu-ni-ca-tion-al** *\-shən-1\ adj*

**com-mu-ni-ca-tive** *\kə-myū-nə-kāt-iv, -ni-kāt-iv\ adj* (1654) 1: tending to communicate: TALKATIVE 2: of or relating to communication — **com-mu-ni-ca-tive-ly** *adv* — **com-mu-ni-ca-tive-ness** *n*

**com-mu-ni-ca-to-ry** *\kə-myū-ni-kə-tōr-ē, -tōr-ē\ adj* (1646) 1: designed to communicate information (~ letters) 2: COMMUNICATIVE

**com-mu-nion** *\kə-myū-nyən\ n* [ME, fr. L *communio*, *communio* mutual participation, fr. *communis*] (14c) 1: an act or instance of sharing 2 a *cap*: a Christian sacrament in which bread and wine are partaken of as a commemoration of the death of Christ b: the act of receiving the sacrament c *cap*: the part of the Mass in which the sacrament is received d *cap*: a variable verse of Scripture traditionally said or sung at mass during the people's communion — called also **Communion Verse** 3: intimate fellowship or rapport: COMMUNIC-ATION 4: a body of Christians having a common faith and discipline (the Anglican ~)

**Communion Sunday** *n* (1878): a Sunday (as the first Sunday of the month) on which a Protestant church regularly holds a Communion service

**com-mu-ni-qué** *\kə-myū-nə-kā, -myū-nə-\ n* [F, fr. pp. of *communiquer* to communicate, fr. L *communicare*] (1852): BULLETIN 1